

AMENDMENTS TO THE CLAIMS:

1. (Currently amended) A data access method used in a network system having several node devices connected for communications configured so that each node device can execute certain processing by accessing memories in said several node devices or cache memories at a higher access speed ~~wherein~~, said method comprising:

in each node device;

executing ~~the~~ a speculative access to said memories in the system while reading out, from ~~the~~ a tag memory, ~~the~~ a tag information as ~~the~~ information related to ~~the~~ a data storage status in said cache memories provided in the system, and

deciding whether or not to abolish the data acquired from said memories by said speculative access according to said tag information read out,

wherein said tag information indicates a data storage status comprising one of three possible states, including:

1) data is not found in any of said node devices;

2) data is found in more than one of said node devices; and

3) data is found in only one node device.

2. (Currently amended) A data access method used in a network system having several node devices connected for mutual communications configured so that each node device can execute certain processing by reading out data from memories in said several node devices or cache memories at a higher access speed ~~wherein~~, said method comprising:

in each node device;

executing ~~the~~ a speculative readout of ~~the~~ data from said memories in the

node devices while reading out, from ~~the~~ a tag memory, ~~the~~ a tag information as ~~the~~ information related to ~~the~~ a data storage status in said cache memories provided in the system,

judging whether ~~the~~ a same data as ~~the~~ a data subject to said speculative readout is in any of the cache memories based on said tag information read out,

sending said speculative readout data to ~~the~~ a processor in ~~the~~ a self node device when the same data as the data subject to said speculative readout is not found in any of the cache memories, and

acquiring, when the same data as the data subject to said speculative readout is in one of the cache memories, such data in said cache memory and sending said data to the processor in the self node device,

wherein said tag information indicates a data storage status comprising one of three possible states, including:

- 1) data is not found in any of said node devices;
- 2) data is found in more than one of said node devices; and
- 3) data is found in only one mode device.

3. (Currently amended) A data access method used in a network system as set forth in Claim 2,

wherein said speculative readout data is abolished when said data found in the cache memory is acquired and sent to the processor in the self node device.

4. (Currently amended) A data access method used in a network system as set forth in Claim 2,

wherein each node device speculatively reads out the data from the memory in the self node device while reading out said tag information from the tag memory.

5. (Currently amended) A data access method used in a network system as set forth in Claim 2,

wherein each node device speculatively reads out the data from the memory in the other node device while reading out said tag information from the tag memory.

6. (Currently amended) A network system having several node devices connected for communications configured so that each node device can execute certain processing by accessing memories in said several node devices or cache memories at a higher access speed ~~wherein~~ each node device comprising:

access means ~~to~~ for speculatively ~~access~~ accessing said memories in the system while reading out, from ~~the~~ a tag memory, ~~the~~ a tag information as ~~the~~ information related to ~~the~~ data storage status in said cache memories provided in the system; and

judgment means ~~to judge~~ for judging whether or not to abolish ~~the~~ data acquired from said memories by said speculative access according to said tag information read out,

wherein said tag information indicates a data storage status comprising one of three possible states, including:

1) data is not found in any of said node devices;

2) data is found in more than one of said node devices; and

3) data is found in only one mode device.

7. (Currently amended) A network system having several node devices connected by a communication mechanism for mutual communications configured so that each node device can execute certain processing by reading out data from memories in said several node devices or cache memories at a higher access speed ~~wherein~~ each node device comprising:

speculative readout means ~~to execute the~~ for executing a speculative readout of the data from said memories in the node devices while reading out, from ~~the~~ a tag memory, ~~the~~ tag information as ~~the~~ information related to ~~the~~ a data storage status in said cache memories provided in the ~~system~~, system;

a judgment means ~~to judge~~ for judging whether the same data as ~~the~~ data subject to said speculative readout is in any of the cache memories based on said tag information read out, ~~and~~ out; and

~~a~~-read data processing means which sends said speculative readout data to ~~the~~ a processor in ~~the~~ a self node device when ~~the~~ same data as ~~the~~ data subject to said speculative readout is judged not existing in any of the cache memories and, when the same data is judged existing in one of the cache memories, acquires such data in said cache memory and sends said data to the processor in the self node device,

wherein said tag information indicates a data storage status comprising one of three possible states, including:

- 1) data is not found in any of said node devices;
- 2) data is found in more than one of said node devices; and
- 3) data is found in only one node device.

8. (Currently amended) A network system as set forth in Claim 7, wherein said data processing means ~~abolishing~~ abolishes said speculative readout data when said data found in the cache memory is acquired and sent to the processor in the self node device.

9. (Currently amended) A network system as set forth in Claim 7, wherein said speculative readout means speculatively reads out ~~the~~ data from ~~the~~ a memory in the self node device.

10. (Currently amended) A network system as set forth in Claim 7, wherein said speculative readout means speculatively reads out ~~the~~ data from ~~the~~ a memory in ~~the other~~ another node device.

11. (Currently amended) A network system as set forth in Claim 7, wherein said tag memory is provided in said communication mechanism.

12. (Currently amended) A computer readable memory storing a data access program for controlling the data access in a network system having several node devices connected for mutual communications configured so that each node device can execute certain processing by accessing memories in said several node devices or cache memories at a higher access speed ~~wherein~~ said data access program executing;

speculative access processing for the memories in the system while reading out, from ~~the~~ a tag memory, ~~the~~ tag information as ~~the~~ information related to ~~the~~ a data storage status in said cache memories provided in the system; and

processing to judge whether or not to abolish ~~the~~ data acquired from said

memories by said speculative access according to said tag information read out,

wherein said tag information indicates a data storage status comprising one of three possible states, including:

1) data is not found in any of said node devices;

2) data is found in more than one of said node devices; and

3) data is found in only one node device.

13. (Currently amended) A computer readable memory storing a data access program for controlling the data access in a network system having several node devices connected for mutual communications configured so that each node device can execute certain processing by reading out data from memories in said several node devices or cache memories at a higher access speed ~~wherein~~ said data access program executing:

speculative readout processing to read out ~~the~~ data from said memories in the node devices while reading out, from ~~the~~ a tag memory, ~~the~~ tag information as ~~the~~ information related to ~~the~~ a data storage status in said cache memories provided in the ~~system~~, system;

judgment processing to judge whether ~~the~~ same data as ~~the~~ data subject to said speculative readout is found in any of the cache memories, based on said tag information read out, ~~and~~ out;

processing, when the same data as the data subject to said speculative readout is not found in any of the cache memories, to send said speculative readout data to ~~the~~ a processor in ~~the~~ a self node device device; and,

processing, when the same data as the data subject to said speculative readout is found in one of the cache memories, to acquire such data in said cache memory and send said data to the processor in the self node device,

wherein said tag information indicates a data storage status comprising one of three possible states, including:

- 1) data is not found in any of said node devices;
- 2) data is found in more than one of said node devices; and
- 3) data is found in only one node device.

14. (Currently amended) A computer readable memory storing a data access program for controlling ~~the~~ data access in a network system as set forth in Claim 13,

wherein said data access program abolishes said speculative readout data when acquiring the data in said cache memory and sends such data to the processor in the self node device.

15. (Currently amended) A computer readable memory storing a data access program for controlling the data access in a network system as set forth in Claim 13,

wherein said data access program speculatively reads out ~~the~~ data from ~~the~~ memories in the self node device while reading out said tag information from the tag memory.

16. (Currently amended) A computer readable memory storing a data access program for controlling the data access in a network system as set forth in Claim 13,

wherein said data access program speculatively reads out ~~the~~ data from ~~the~~ memories in ~~the other~~ another node device while reading out said tag information from the tag memory.

17. (New) The method of claim 1, wherein said deciding whether or not to abolish the data acquired from said memories by said speculative access is based upon a logical combination of five bits of information defining a status of said speculative access, including a “Modify found” bit that defines whether said data has been found to be currently in a cache memory in one of said node devices in said system.

18. (New) The network system of claim 6, wherein said deciding whether or not to abolish the data acquired from said memories by said speculative access is based upon a logical combination of five bits of information defining a status of said speculative access, including a “Modify found” bit that defines whether said data has been found to be currently in a cache memory in one of said node devices in said system.

19. (New) The network system of claim 7, wherein said deciding whether or not to abolish the data acquired from said memories by said speculative access is based upon a logical combination of five bits of information defining a status of said speculative access, including a “Modify found” bit that defines whether said data has been found to be currently in a cache memory in one of said node devices in said system.

20. (New) The computer readable memory of claim 12, wherein said deciding whether or not to abolish the data acquired from said memories by said speculative access is based upon a logical combination of five bits of information defining a status of said speculative access, including a “Modify found” bit that defines whether said data has been found to be currently in a cache memory in one of said node devices in said system.